

## ABSTRACT OF THE DISCLOSURE

The present invention provides methods and systems for evaluating network traffic. By generating successive sets of weights relating to a performance surface using a variety of heuristic techniques, and then evaluating the weights using a piece-wise linear cost function, a number of performance minima can be found. By continuously searching the performance surface, a champion minimum can be extracted. Searching the performance surface can be quickly and efficiently accomplished using a variety of functions such as an anti-cycling function, an impatience function, a dynamic graph technique and a diversity process.

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